BRUHAT BENGALURU MAHANAGARA PALIKE

Executive Engineer Yelahanka Division

Name of Work : Consultancy Services for Preparation of DPR for the work of Improvements to roads, drains and other developmental works in kempegowda ward no- 01 under SWM head in Chief Minister Nava Nagarothan grants of Yelahanka division.(package-06)

89	Construction of RCC drain at Srinivasapura main and cross roads in ward no-01	200.00				
91	Desk Supply for students at Govt Schools and Collages comes under yelahanka BBMP Limits ward No 1	100.00				
92	Improvements to roads and drains at Maruthinagara yellamma temple and surrounding areas in kempegowda ward no -01 of yelahanka Sub division	150.00				
93	Improvements to balance road surabhi layout and burial ground road and surroundigng areas in kempegowda ward no -01 of yelahanka Sub division	200.00				
94	Improvements to balance road and drain kondappa garden and surrounding areas in kempegowda ward no -01 of yelahanka Sub division	100.00				
95	Improvements to balance road and drain vikasa layout and surrounding areas in kempegowda ward no -01 of yelahanka Sub division	150.00				
101	Asphalting ot roads at vianayaka nagara main road (from NH -7 road to ward boarder in kempegowda ward no -01 of yelahanka Sub division	100.00				

Sl. No.	Description	Unit	Quantity							Total Qty.	Total Rate	Amount
			GO SI NO-89	GO SI NO-91	GO SI NO-92	GO SI NO-93	GO SI NO-94	GO SI NO-95	GO SI NO-101			
1	Desk Supply for students at Govt Schools and Colleges comes under yelahanka BBMP limits ward NO-1 5 seater student duel desk	No		500.00						500.00	16800.00	8400000
2	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301	cum	301.00		903.50	625	330.00		151.67	2311.17	125.59	290259.8403
3	KSRB 2-2.1 : Earthwork excavation by manual means for foundation of buildings, culverts, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. No. KBS 2.1 (a) I 2.3.5 page no 6	cum	433.58		651.82	1573.8	513.00	1422.00	784.80	5379.00	399.07	2146597.53
4	Removing &refixing stone slab of drain	sqm			360.00	720.9	1598.40		135.00	2814.30	111.30	313231.59

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5	KSRB M300-19 Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specification no 301 pag no 147 lt no 19.62	cum			96.00	216.27	426.24		36.00	774.51	36.04	27913.3404
6	KSRB 4-1.7 Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 Page No.13 Item No.4.7	cum	65.74		94.88	231.75	75.15	213.30	126.72	807.54	5627.54	4544463.652
7	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200, including cost of materials, labour, HOM complete as per specifications. Page No.270. Item No.37.59.1	cum	156.11		239.01	566.64	189.81	497.70	319.39	1968.66	7273.72	14339481.62
8	KSRRB M 2200-6 Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. MORTH Specification No 1600 & 2200 TMT Bars Fe 500 Page No 229 I. No 28.8.2 SR 18-19	Tn	9.82		15.73	35.28	12.35	29.86	19.16	122.20	72326.98	8838356.956
9	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting , including form work, cost of all materials, labour,hire charges of chinery,loading ,unloading ,lead and lift, transportation etc ,complete. (Data Rate)	Sqm	352.80		573.00 571.5	1528	713.88	1425.00	823.55	5416.23	2337.00	12657729.51

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10	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of all materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)	Sqm	25.20		78.00	72	54.00	0.00		229.90	5418.00	1241805.6
11	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete. Page No.27. Item No.5.30	Nos			444.44	1849	3223.00	3512.00	1112.00	10140.44	432.48	4385537.491
12	KSRRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Page No.180. Item No.24.1	sqm			90.00	356.4	652.50	711.00	112.50	1922.40	84.80	163019.52
13	KSRRB M600-1 Construction of dry lean cement concrete mix CC 1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601 of MORTH V Revision and IS 456 Table-5 22.1 1 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor Page No.174. Item No.22.1.1	Cum	166.50		722.63	375	52.56			1316.69	3800.10	5003553.669

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14	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to 18:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of	Cum	168.50		722.63	312.5	43.80			1245.43	5210.96	6489685.913
15	KSRRB M300-53. Constuction of embankment with approved material Gravel/ Murrum with all lifts and leads, trasporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel/ murrum, watering charges & compaction by vibraatory roller to 95% of modified proctors desnsity. MORTH Specifications No.305 Page No- 147. I. No- 19.60	cum	603.00							603.00	344.50	207733.5
16	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method byrotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. Page No.153. Item No.20.6	cum	654.75				165.00		75.84	895.59	1855.00	1661319.45

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17	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406. Page No. 155. Item No.20.18	cum	654.75					165.00		75.84	895.59	2001.28	1792326.355
18	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)	sqm	2265.00					1100.00		505.57	3870.57	33.92	13128977344
19	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 Page No.158. Item No.21.2	Sqm						1100.00		1375.00	2475.00	5.30	13117.5
20	KSRRB M500-17. Providing and laying Dense Graded Bituminous Macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. MORTH Specification No. 507. Using 100/120 TPH capacity HMP with sensor paver Gr-II (50 mm to 75mm) with 4.5% VG-30 Bitumen. Page No.160. Item No.21.17.2	Cum	218.25					8.25		25.28	251.78	7620.34	1918649.205
21	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 0.25 kg per sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Chapter 5 Page No.158. Item No.21.7	Sqm	4365.00					1100.00		1375.00	6840.00	12.72	87004.8

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22	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP- 53-2015.do- using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4% of modified bituminous binder consisting of 4.97% ofVG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) Page No. 171. Item No.21 78.12	Cum	174.60					44.00		55.00	273.60	8699.42	2380161.312
23	Providing and fixing of retro - reflectorised cautionary, mandatory and informatory sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 em x 45 cm x 60 em, 60 cm below ground level as per approved drawing Page No.180. Item No.24.2	Nos	670.00					100.00		250.00	1020.00	137.80	140556
24	KSRRB M800-4. Direction and Place Identification Signs / Project information Board with size more than 0.9 sqm Size Board:-Providing and erecting direction and place identification retro- reflectorised sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 em, 60 em below ground level as per approved drawing. Page No.180. Item No.24.4	Nos	3.00		9.00	6	2.00		1.00	21.00	7567.34	158914.14
25	KSRRB M800-13. Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC.35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 Page No.182. Item No.24.15	Sqm	245.67		332.70	132	58.57		91.67	860.61	454.74	391353.7914

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26	for Rain water harvesting work including 40mm jelly, 20mm jelly coarse sand, fine sand, 12.50 mm chips as per data rates	Nos	2.00		4	4	11.00	7.00	6	34.00	20682.00	703988
27												
										0.00		0
28	KSRRB M2100-1.1. Earth Work excavation in all kinds of soils for foundation of structures as per drawing and technical specification, inculding setting out, providing shoring and bracing,removal of stumps and other deleterious matter, dressing of sides and bottom and filling complete as per specification. Morth specification No.304 (KSRRB M2100-1.1-do- i) 0m to 3 m depth by manual means (Pg No.220 INo.27.1)	cum	250.99							250.99	206.70	51879.47215
29	KSRRB M2100-10.Providing and laying plain cement concrete of mix 1:3:6 with OPC @ 220kgs,with crushed 40mm and down size graded granite metal coarse aggregates @ 0.89cum and fine aggregates @0.46cum, in foundation mechanically mixed , Placed in foundation and compacted by vibrastion inculding curing for 14 days inculding of all metarials , labour, HOM curring,form works, Scaffolding and centering complete as per specifications. MORTH Specifications No.2100 (Pg.222 INo.27.18)	cum	5.25							5.25	5421.90	28444.58821
30	KSRRB M2100-7.Back filling the Marshy Foundations pits of abutment wing walls and returns using approved material with ramming and wtaering with all lead and lifts, cost of labour,HOM etc., complete as per specification and direction of the Engineer of the work" MORTH specification No.304 (PG.221 INo. 27.15)	cum	4.90							4.90	369.94	1811.753006
31	KSRRB M2200-9. Providing and laying of filter media with granular materials / stone crushed aggregates satisying the requirements laid down in clause 2504.2.2 of MORTH specifications to thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condistion materials, labour , HOM com[plete as per specifications. MORTH Spectication No. 2504.2.2	cum	11.30							11.30	2216.46	25047.41655

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32	KSRRB M2100-10.Providing and laying plain cement concrete of mix 1:3:6 with OPC @ 220kgs,with crushed 40mm and down size graded granite metal coarse aggregates @ 0.89cum and fine aggregates @0.46cum, in foundation mechanically mixed , Placed in foundation and compacted by vibrastion inculding curing for 14 days inculding of all metarials , labour, HOM curing,form works, Scaffolding and centering complete as per specifications. MORTH Specifications No.2100 (Pg.222 INo.27.18)	cum	29.97							29.97	5421.90	162517.3861
33	KSRRB M2100-19.2. Providing and laying Plain/ Reinforced cement Concrete in open Foundation with OPC design mix M30 @ 360kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69cum and fine aggregates @ 0.46cum, with superplastizer @ 3 lts confirming to IS9103-1999 reaffirmed-2008 complete as per Drwaing ans Techinxal Specifications inculding cost of all materials, labour, HOM curing, from works, scaffolding and centering as per specifications. MORTH Specification No. 1500, 1700 & 2100 (Pgno.223 INO.27.35)	cum	19.81							19.81	5389.04	106731.2845
34	KSRRB M2100-19.2. Providing and laying Plain/ Reinforced cement Concrete in open Foundation with OPC design mix M30 @ 360kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69cum and fine aggregates @ 0.46cum, with superplastizer @ 3 lts confirming to IS9103-1999 reaffirmed-2008 complete as per Drwaing ans Techinxal Specifications inculding cost of all materials, labour, HOM curing, from works, scaffolding and centering as per specifications. MORTH Specification No. 1500, 1700 & 2100 (Pgno.223 INO.27.35)	cum	11.44							11.44	5389.04	61653.1212
35	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and I or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 (PGNo.229 INO.28.8)	Tn	0.82							0.82	72326.98	59308.1236

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36	KSRRB M2100-19.2. Providing and laying Plain/ Reinforced cement Concrete in open Foundation with OPC design mix M30 @ 360kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69cum and fine aggregates @ 0.46cum, with superplastizer @ 3 lts confirming to IS9103-1999 reaffirmed-2008 complete as per Drwaing ans Techinxal Specifications inculding cost of all materials, labour, HOM curing, from works, scaffolding and centering as per specifications. MORTH Specification No. 1500, 1700 & 2100 (Pgno.223 INO.27.35)	cum	4.46							4.46	5389.04	24008.7732
37	KSRRB M2200-8. Providing weep holes in brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100mm dia AC pipe, extending through the full width of the structure with slope of 1V: 20H towards drawing force.Complete as per drawing and tecgnical specifications including cost of materials, labour,HOM complete as per specifications. MORTH specification No.2706 & 2200 (Pg No.229 INo.28.10)	Rmtr	22.00							22.00	155.82	3428.04
38	KSRRB M2700-6. PCC M15 Grade levelling course below approch slab complete as per drawing and technical specification complete as per specification MORTH Specification No. 2700 (Pg No.247 Ino.32.6)	cum	3.28							3.28	5747.32	18868.45156
39	KSRRB M2700-6. PCC M30 Reinforced cement concrete M30 approach slab including reinforcement @ 70 Kg/cum and formwork complete as per drawing and technical specification including cost of materials , labour,HOM complete as per specifications. MORTH Specification No. 1500, 1600, 1700 & 2704 (Pg No.247 Ino.32.7)	cum	10.29							10.29	10558.66	108648.6114
40	KSRRB M2300-9.1. Providing and placing Reinforced / Prestressed cement concrete in super- structure as per drawing and technical specification complete as per specifications. PSC with OPC design mix M40 @ 420kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.67 cum and fine aggregates @ 0.44 cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 including cost of materials,labour,HOM , curing,form works, scaffolding and centering complete as per specifications. MORTH Specification No. 1500,1600 & 1700 (pgNo. 235 INo.29.19) Height upto 5 m	cum	38.80							38.80	7880.04	305745.552

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41	KSRRB M2500-4.1: Providing and laying stones of size 0.3x0.3x0.3 m on slopes laid over prepared filter media inculding boulder apron laid dry in front of toe of embankment complete as per drwaing and technical specifications Inculding cost of materials,labour,HOM complete as per specifications.A. Stone / Boulder MORTH Specification No.2504(Pgno.241 INo. 30.5)	cum	5.96							5.96	1709.78	10190.35066
42	KSRRb M800-6. Painting two coats on New concrete Surface: Painting two coats after filling the surface with synthetic enamel paint in all shades on new plasterred concrete surfaces complete as per Specifications. MORTH Specification no.803 (PGNo.181 INO. 24.7)	sqm	29.10							29.10	86.92	2529.372
43	Samudaya Bhavan Part-B									0.00		0
44	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. (P5/2.1)	Cum	14.60							14.60	268.92	3926.232
45	KSRB 2-2.2 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m. In depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications. Specification. No. KBS 2.1(b) / 2.3.5 (P.5/2.4 PWD SR - 2018-19).	Cum	48.24							48.24	322.92	15577.6608
46	KSRB 2.8: Providing and Filling in foundation with granite / trap broken metal 100mm. And down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. Complete as per specifications. (P6/2.15)	Cum	4.50							4.50	2623.32	11804.94
47	KSRRB 2900-4.1: Providing and laying in position plain cement concrete mix 1:4:8 with stone aggregate 40mm and down size in foundation upto a depth of 2m below ground level and upto a height of 1.5m above ground level / bed level machine mixed, concrete laid in layers not exceeding 15cms thick well compacted, cost of all materials, labour, HOM of machineries, curing complete as per specifications. (P.12/4.3)	Cum	22.18							22.18	5510.16	122193.3082

48	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specification. KBS 5.1.13 (P.22/5.6)	Cum	19.36								19.36	4963.68	96073.26732
49	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 (P.22/5.9)	Cum	6.99								6.99	6310.44	44086.31145
50	KSRB 4-1.5: Providing and laying in position plain cement concrete of nominal mix 1:2:4 using 20mm and down size graded granite metal, machine mixed, concrete laid in layers not excedding 15cms. Thick well compacted in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specification.(P13/4.6)	Cum	1.55								1.55	5855.76	9071.0674
51	KSRB 15.1.1 Providing flush pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.115/1.15.1)	Sqm	21.87								21.87	155.52	3401.2224
52	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. (P.7/2.10 PWD SR - 2018-19).	Cum	48.24								48.24	217.08	10471.9392
53	KSRB 2.6: Privding and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications. (P7/2.13)	Cum	17.26								17.26	2224.80	38409.5034
54	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of materials, labour complete as per specifications. (P15/4.28)	Sqm	54.00								54.00	278.64	15046.56
55	KSRB 4-6.5: Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square/ rectangular/polygon in plan including cost of all materials, labour complete as per specifications. (P15/4.32)	Sqm	115.20								115.20	336.96	38817.792

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56	B) First Floor:- Columns	sqm	72.00							72.00	340.40	24494.4
57	KSRB 4-6.9: Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floor, cills, plinth including cost of all materials, labour complete as per specifications. (P15/4.36)	Sqm	23.10							23.10	815.40	18835.74
58	KSRB 4-6.7: Providing and removing centerign, shuttering strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of materials, labour complete as per specifications.(P15/4.34)	sqm	86.13							86.13	315.36	27161.9568
59	B) First Floor:- Columns	sqm	86.13							86.13	318.60	27441.018
60	KSRB 4-6.10 : Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2 (P 15/1.4.37)	Sqm	134.46							134.46	348.84	46905.0264
61	B) First Floor:- Columns	sqm	137.09							137.09	352.08	48267.5274
62	KSRB 4-6.2 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200mm including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.14/1.4.29)	Sqm	115.61							115.61	475.20	54937.872
63	B) First Floor:- Columns	sqm	115.61							115.61	478.44	55312.4484
64	KSRB 4.2.8 : Providing and laying in position reinforced cement concrete of mix 1:1.5:3 with 20mm and down size graded granite metal, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for R.C.C beams, columns of all sizes in foundation plinth and superstructure ground floor level for roof slabs, staircase, lintels, columns, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 (P.13/1.4.13)	Cum	64.22							64.22	6363.30	408661.3426
65	B) First Floor:- Columns	cum	36.34							36.34	6417.36	233181.193
66	KSRB 4.2.10 : Providing and laying in position reinforced cement concrete of mix 1:1.5:3 (M20) with 12mm and down size graded granite metal, machine mixed, well compacted for plain chajja of 7.5 cms average thickness, upto ground floor level, including cost of all materials, labour, HOM of machinery, finishing, curing, complete as per specifications. Specification No. KBS 4.1, 4.6 (P. 13/4.19 PWD SR - 2018-19).	Sqm	134.46							134.46	475.20	63895.392
67	B) First Floor		134.46							134.46	478.44	64331.0424

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68	Providing and fabricating TMT Steel reinforcement bars including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tieing with binding wire, anchoring to the adjoining members wherever necessary, as per designs (laps, hooks and wastages shall not be measured and paid) including cost of all materials, labour, HOM of machineries complete as per specifications. (P16\4.46)	Tonne	11.06							11.06	76675.68	848013.0208
69	Lift charges for steel of all diameters for additional floors over ground floor per floor height of 3.5m. Or part there of cost of labour,complete as per specifications.	Tonne	32.63							32.63	807.84	26359.8192
70	KSRB 5-14: Providing and constructing precast concrete solid blocks with compressive strength not less than 35Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications. (P24/5.27)	Cum	315.41							315.41	984.96	310661.3088
71	Providing and laying flooring for corridors/lobbies using combination of pre polise 19mm thick water cut/gang saw Grey Granite, Black Granite, and strips of 50mm wide pre flamed grey granite using pre polised grey granite 19mm thick 76 % Pre ploised black granite 19mm thcik @ 2% and preflamed 19mm thick grey granite @ 22 % over exbding cement/ colour pigment etc., including cost of all materials, mortar, labour, curing etc., complete as per specification.14.48.1 using 19mm granite width not less than 1200 mm Page No-114 I no-14.48	Sqm	153.99							153.99	2830.68	435882.2598
72	B) First Floor	sqm	112.25							112.25	2832.30	317932.7558
73	KSRB 9.11: Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps) but including cost of materials, labour, HOM of machineries complete as per specifications. Specifications No, KSRB 9.4-2(page No. 53/Item No. 9.10)	Cum	1.38							1.38	94612.32	130814.7781

74	KSRB: 9-27-1 Fixing of door frame in an existing opening including embeeding frame in floor and walls after cutting masonry for holdfasts for embeddding holdfast in cement concrete 1:3:6 of 20mm and down size granite matal painting two coats of coal tar to sides of frame making good the damages to walls and floor as reguired and diposal of the debries with lead upto 50m including cost of materials labour charges complete as per Specifications. (Page No. 51/ Item No. 9.80)									0.00		0
75	Door frames	Nos	5.00							5.00	1475.28	7376.4
76	Window frames	Nos	16.00							16.00	1000.08	16001.28
77	Ventilator frames	Nos	16.00							16.00	854.28	13668.48
78	KSRB 9.7.1 Providing and fixing in position fully panelled Honne wood shutters for doors styles and rails of 30mm. Thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of machineries complete as per specifications. (eccluding cost of fixtures) Specification No. KBS 9.34 (page No. 46/Item No. 9.21)	Sqm	11.97							11.97	4629.96	55420.6212
79	KSRB 9.21.2: Providing and fixing in position half panelled Honne wood shutters for window&ventilatorsstyles and rails of 20mm. Thick with bottom and lock rails 75mm wide top rail and styles 100mm wide as per drawing and panels of 20mm thick including cost of materials, labour, HOM of machineries complete as per specifications. (eccluding cost of fixtures) Specification No. KBS 9.34 (page No. 46/Item No. 9.64)	Sqm	51.84							51.84	4262.76	220983.4784
80	KSRB 7.9: Providing and fixing M.S. Grill work for windows and ventilators weighing 21 kg/sqm using M.S Flats or M.S. Square roads, or combination of M.S. flats and quare roads as per approved design drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures labour and HOM of machinery complete as per specifications. Specification No. KBS 7.12 p no 35 item No. 7.9	Kg's	1202.04							1202.04	102.60	123319.304

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81	KSRB 7.1: Providing and fixing in position collapsable steel shutters with single or double leaf with vertical channel 20mmx10mmx2mm braced with flat iron diagonals 20mmx5mm size, with top and bottom rails of T iron sections of 40x40x6mm with 38mm dia steel pulleys complete with bolt and nuts, locking arrangements, stopers, handles on borht sides with 7.5cms opeinings at 10cms. c to c applying a priming coat of red lead paint. cost of materials, labour. HOM of machinery complete as per specifications.(P33/7.1)	Sqm	7.25								7.25	5626.80	40706.166
82	KSRB 14.14.5 Providing ceramic Tiles of Approved make shade and size for flooring , treads of steps and landing laid on a bed of 12mm thick, cement mortor 1:3 mix , flush pointing with white cement using colour pigment, including cost of Materias , labour curing complete as per specification No. KBS Ceramic tiles of size 15x15cm , 6mm thick	Sqm	4.50								4.50	1213.92	5462.64
83	KSRB 14.17.1 : Providing skirting dado, rises of steps with white glazed tiles 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface which should be measured and paid separately)using glazed tiles of approved make and size including cost of materials labour, complete as per specifications. Specification No. KBS 14.16., 14.17 (Page no. 94/ Item No. 14.40	Sqm	18.00								18.00	1261.44	22705.92
84	KSRB15-3-13 : Providing 12mm thick cement plaster in single coat with cement mortar 1:4, to ceiling including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P. 116/15.22)	Sqm	127.70								127.70	243.00	31029.885
85		sqm	116.93								116.93	246.24	28791.612
86	KSRB15-3.5 : Providing 15mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.115/15.14)	Sqm	362.85								362.85	224.64	81510.624
87		sqm	265.20								265.20	227.88	60433.776
88	KSRB15-7 : Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications. (P.117/15.33)	Sqm	490.55								490.55	34.56	16953.2352
89	B) First Floor		382.13								382.13	37.80	14444.325

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90	KSRB15-3.11 Providing 20mm thick cement plaster in single coat with cement mortar 1:4, to stone masonry and concrete surface including rounding off corners wherever required smooth rendering. Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.116/15.19)	Sqm	132.24							132.24	237.60	31420.224
91	KSRB 15.3.3 Providing 12mm thick cement plaster in single coat with cement mortar 1:6 to brick masonry including rounding off corners wherever required smooth rendering. Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P115/15.11)	Sqm	134.46							134.46	208.44	28026.8424
92	B) First Floor	sqm	197.64							197.64	211.68	41836.4352
93	KSRB 8.6-8: Providing and fixing on wall surface 4.0Kg/Sqcm HDPE rain down water pipes 110mm outer dia. Approved makes and brand with necessary specials like shoes, bends and offsets fixed with iron clamps, wall plugs, screws, including cost of materials, labour, complete as per specifications. (P49/8.19)	Rmtr	27.20							27.20	552.96	15040.512
94	KSRB 15-14.1 Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications.(P119/15.49)	Sqm	490.55							490.55	51.94	25478.9073
95	B) First Floor	sqm	382.13							382.13	53.00	20252.625
96	KSRB 15-13.3: Providing and applying two coats dry distemper of approved brand, and shade on wall surface including priming coat and whitening after thoroughly brooming the surface to remove all dirt, dust, mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. (P.118/15.47.1)	Sqm	134.46							134.46	36.46	4902.4116
97	B) First Floor	sqm	197.64							197.64	37.52	7415.4528
98	KSRB13-1.1 Providing and fixing to wall, ceiling and floor galvanised/mild steel tube 15 mm dia nominal bore with fittings (medium grade weight 1.27 kg/mtr) B class including cost of all materials, labour charges, HOM of equipments and testing complete as per specifictaions. Specification No. KBS 13.2.14/13.8. (P-92 & 13.1).	M	20.00							20.00	219.24	4384.8

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99	KSRB 11-11.8 : Providing and fixing white vitreous china clay, surgeon type wash basin size 660 x 460 with a pair of 15 mm C.P. brass pillar taps with pair of elbow operated levers, C.I./M.S. brackets, 32 mm C.P. brass waste of standard pattern, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour, curing complete as per specification. KBS 11 (Page : 83 Item No. 12.30)	Unit	2.00							2.00	4973.40	9946.8
100	KSRB 13-6.1-1 : Providing and fixing in position brass bib cock of approved quality 25 mm nominal bore including cost of all materials, labour and HOM of equipments with all leads, complete as per specifications. Specification No. KBS 13.2.2/13.3 (Page No. 80 & Item No. 13.23).	Each	2.00							2.00	201.40	402.8
101	KSRB 11-2 : Providing and fixing white vitreous china clay, water closet Orissa Pattern of size 580 x 440 mm with integral type footrest, 100mm S or P trap, 10 litre low level, P.V.C. flushing cistern (all are approved make) with fittings, C.I./M.S. brackets, 32 mm diameter flush pipe fittings and clamps, overflow arrangements with special and 25 mm mosquito proof coupling of approved design, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour, curing complete as per specification. KBS 11 (Page : 67 Item No. 12.2)	Pan	2.00							2.00	4561.92	9123.84
102	KSRB 11-8.1 : Providing and fixing white vitreous china clay, wall corner type, lipped front urinal basin of size 580 x 440 x 265 mm with 5 litres P.V.C. automatic flushing cistern C.I./M.S. brackets, standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour, curing complete as per specification. KBS 11 (Page : 80 Item No. 12.11)	Unit	2.00							2.00	2859.84	5719.68
103	Supplying water storage tanks made of virgin polymer (LLDPE) with two layers outer black or Blue and inner white layer of approved quality and make, conforming to I.S.I/ISO/SSI specifications.	Ltr	2000.00							2000.00	6.48	12960
104	KSRB 11-15.3: Providing and fixing 453x357mm rectangular shape mirror with plastic moulded frame of approved make and shade with 6mm thick hard board backing including cost of materials, labour complete as per specifications.	Unit	2.00							2.00	1226.88	2453.76

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105	Applying Primer coat over new wood surface and / or wood based surface with white lead paint priming including preparing the surface afetr throughly cleaning oil, grease, dirt and other foreign matter, sand papering and knotting ready mix paint including cost of materials, labour complete as per Specifications (P No. 102 Item No.15.59 PWD SR 2018-19	Sqm	124.13								124.13	54.00	6703.155
106	Providing and Applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, clening the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as per specifications (P No. 102 Item No.15.60 PWD SR 2018-19	Sqm	124.13								124.13	79.92	9920.6694
107	Supplying and wiring adoptiong loop system in existing PVC conduit /casing caping using copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/gang box, the other end of the wires shall be terminated with sufficient loose legnth in a wood/PVC round block, complete for each outlet. (P.4/1.8.I.C) Electrical-SR 2012-13)										0.00		0
108	b) Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch	Nos	15.00								15.00	175.00	2625
109	c) Long point above 6Mtr upto 10Mtr from tapping point to out let via switch	Nos	10.00								10.00	368.00	3680
110	Supplying 6A flush /projected type socket and a 6 amps flush/projected type SP switch either surface mounting in a gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required. (P.6/1.12a) Electrical -SR 2012-13)	No	15.00								15.00	91.00	1365
111	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, necessary masonry patch work complete. (P.4/1.6) Electrical -SR 2012-13)	Each									0.00		0
112	a) 4"x4"x3"		10.00								10.00	44.00	440
113	b) 12"x12"x3"		6.00								6.00	98.00	588
114	c) 10"x7"x3"		8.00								8.00	68.00	544
115	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches regulated etc., and fixing on existing wooden or metal box using N.F. screws., (P.10/1.22) Electrical SR - -SR 2012-13)	Sq. cmt	3000.00								3000.00	0.22	660
116	Extra for groove cutting, plastering and colour washing for embedding PVC conduit/GI pipe and plastering finishing the wall upto wall surface complete upto 50mm conduit in brick in wall (P.3/1.7a) Electrical-SR 2012-13)	Rmtr	240.00								240.00	14.00	3360

117	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit. The pit should be filled with equal proportion of salt and charcoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as per IS1 specification 7.3.3 of IS 732 using 12 mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 122 mm dia. (P.68/1.2) Electrical -SR 2012-13)	Each	6.00								6.00	3000.00	18000
118	Supplying and fixing of porcelain fuse chanel with cut out on existing wooden/panel using ncessary nuts, bolts and washers etc complete (P.32/1.3a) Electrical -SR 2012-13)	Each	10.00								10.00	54.00	540
119	Supplying 20mm dia 2mm thick heavy guage PVC conduit pipe with suitable size bends, metal junction boxes, adhesive paste etc and running before concreting the slabs. The conduit should be tied to the reinforcement roads by using binding wire and unused ways of junction boxes and pipe ends should be covered using PVC and enclosures and run with 18 SWG GI fish wire run throughout the conduit wherever necessary. (P.2/1.2a) Electrical - SR 2012-13)	Rmtr	240.00								240.00	32.00	7680
120	Supplying and fixing PBBC brass/Bakelite straight or slant batten holder and wiring, within 60W/230 Volts lamps. (P 13/1.12a) Electrical -SR 2012-13)	No.	10.00								10.00	60.00	600
121	Supply patty type fluorescent tube light fitting of 4 feet 40 watts fluorescent tube of 230 volts made of M.S. sheet and stove enameled with heavy duty polyfil aluminum choke, starter, locking type brass contact holders mounted on foldable type sheet base fully wired for use on 230 volts AC supply including 1 Nos 4'-36/40 watts fluorecent tube A Group (P 16/1.2a) Electrical -SR 2012-13)	No	20.00								20.00	400.00	8000
122	Wiring for lighting / power circute using one of PVC insulated 1100v/grade multies and copper conductor single core cable in open or consealed system of wiring A Group materials 1.50 Sqmm materials (P.9/1.20(b) Electrical -SR 2012-13)	Rmtr	960.00								960.00	15.00	14400
123	Supplying and running of GI / Copper conductor for grounding & (along with other wires of CTS or conduit system of wiring) using if necessary suitable size clamps bolts nuts and washers etc. (P.68/1.3/c) Electrical -SR 2012-13)	Rmtr	30.00								30.00	221.00	6630

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124	Supplying and fixing miniature circuit breakers/Isolators on existing MCB distribution boards using necessary fixing materials and wiring complete as required (P.36/1.12Ba) Electrical -SR 2012-13)	No.	5.00							5.00	370.00	1850
125	Supplying capacitor type ceiling fan complete with down rod blades, shakle, regulator canopies etc., for operation on 230 volts, 50 cycles, Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system and as per technical data approved (Almanord, Unique ISI, Anchor, Crompton, Khaitan, Bajaj, Usha, Johnson make) (P.23/1.23/IIa) Electrical -SR 2012-13)	Nos	10.00							10.00	1900.00	19000
126	Fixing a ceiling fan of all capacities and all types to the existing S hook with fan regulator to the existing board together with supplying and fixing a 5 ampers ceiling rose, necessary length of 23/0.0076 inch PVC insulated twin twisted copper wire and wiring completely. (P.29/1.8) Electrical -SR 2012-13)	Nos	12.00							12.00	105.00	1260
127	Supplying and fixing 32mm dia class A GI pipe bracket upto 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete. (P.28/1.12b) Electrical-SR 2012-13)	Nos	12.00							12.00	685.00	8220
128	Digging of trench of 0.6m deep x 0.50mtr wide refilling the trench to the required ground level and consolidating etc., complete. In Hard Soil (P 70/1.6b) Electrical - SR 2012-13)	Rmtr	40.00								50.00	2000
											Sub total	84013377.57
											12 % GST	10081605.31
											DPR and PMC 2%	1680267.55
											tender premum 5 %	4200668.88
											Miscellaneous & Rounding off	24080.69
											Total Amount	100000000.00

Administrative Sanction for Rs. 1000.00
Ten crore only
is accorded under head 2018-19
Navanagara Vikasa Yojana
Chief Minister's
Registered as CE No. ..... Subject
to conditions contained in enclosed memo
No EE/YHK/96/2019-20 Dt. 3-10-2019

Executive Engineer

CERTIFICATE

1. The work spot has been inspected and the work is found necessary.
2. This estimate is prepared as per C.S.R. of 2018-19
3. The provisions were made in this estimate are necessary and adequate.
4. This works come under B.B.M.P. limits.

Assistant Engineer

Executive Engineer
Yelahanka Division
Bangalore-64

Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

AARTN ASSOCIATES
DATE
BANGALORE